11. (Amended) An analyser as claimed in claim 1 wherein said outer field defining means is maintained, in use, at a potential relative to said inner field defining means.

A7 end

12. (Amended) An analyser as claimed in claim 1 wherein said inner field defining means and said outer field defining means comprise an inner cylinder and an outer cylinder respectively, wherein said inner cylinder is maintained, in use, at a uniform potential and said outer cylinder is maintained, in use, at potential varying monotonically in the axial direction.

A3

15. (Amended) An analyser as claimed in claim 11 wherein said outer field defining means comprises a plurality of discrete field defining elements, each said element being maintained, in use, at a different respective potential with respect to said inner field defining means.

A4

18. (Amended) An analyser as claimed in claim 11 wherein said outer field defining means comprises a plurality of discrete field defining elements each being made from electrically resistive material and being maintained, in use, at a respective potential which increases monotonically in the axial direction.

A5 contd

21. (Amended) An analyser as claimed in claim 1 including first and second end elements located at opposite ends of said inner and outer field defining means in respective planes orthogonal to said axis, each of said first and second end elements being

A5 end

maintained in use at a potential relative to said inner field defining means which varies logarithmically in the radial direction.

24. (Amended) An analyser as claimed in claim 21 wherein charged particles having different energies are brought to a focus by the electrostatic focusing field at different respective discrete positions in the plane of one of said first and second end elements.

A6

25. (Amended) An analyser as claimed in claim 1 wherein said electrostatic focusing means is so configured that the distribution of potential in said electrostatic focusing field is uniform as a function of azimuthal angle about said axis.

26. (Amended) An analyser as claimed in claim 1 wherein said electrostatic focusing means is so configured that the distribution of potential in said electrostatic focusing field has n-fold rotational symmetry about said axis, where n is an integer.

27. (Amended) An analyser as claimed in claim 11 wherein said inner field defining means and/or said outer field defining means has n-fold rotational symmetry about said axis, where n is an integer.

A7 cont'd

30. (Amended) An analyser as claimed in claim 1 wherein said charged particles are brought to a focus at discrete positions spaced apart from each other along said inner field defining means and said surface of said detection means is located at and conforms to said inner field defining means to detect the focused charged particles.

31. (Amended) An analyser as claimed in claim 1 wherein said charged particles are brought to a focus at said axis and said surface of said detection means is located on said axis to detect the focused charged particles.

A7 end

32. (Amended) An analyser as claimed in claim 1 wherein said charged particle source is located on said axis.

34. (Amended) An analyser as claimed in claim 1 wherein said charged particle source comprises a target located on said axis and means for directing radiation onto said target whereby to generate said charged particles, said target and said means for directing radiation being located within said inner field defining means.

A8

35. (Amended) An analyser as claimed in claim 33 wherein said means for directing radiation is an electron gun.

36. (Amended) An analyser as claimed in claim 1 wherein said charged particle source directs charged particles into said electrostatic focusing field over a predetermined angular range in azimuth about said axis.

38. (Amended) An analyser as claimed in claim 1 wherein said charged particle source directs charged particles into said electrostatic focusing field over two or more discrete angular ranges in azimuth about said axis.

A9, cont'd

A9 end

39. (Amended) An analyser as claimed in claim 1 wherein said charged particle source directs charged particles into said electrostatic focusing field over one or more predetermined angular range in azimuth about said axis, said charged particles being admitted to the electrostatic focusing field by one or more windows in the inner field defining means.

A10

41. (Amended) An analyser as claimed in claim 1 wherein said charged particle source directs charged particles into said electrostatic focusing field over two or more predetermined angular range in azimuth about said axis, and said detection means is so configured and arranged as to detect charged particles derived from each said angular range.

42. (Amended) An analyser as claimed in claim 1 wherein said detection means comprises one or more detector selected from a multi channel array detector, a microsphere array detector and a position-sensitive resistive plate detector.

A11

44. (Amended) An analyser as claimed in claim 1 including means for adjusting the axial position of said charged particle source.

A12

46. (Amended) An analyser as claimed in claim 1 wherein said charged particle source includes aperture means for directing charged particles into said electrostatic focusing field over a predetermined angular range in elevation relative to said axis.

A13

48. (Amended) An analyser as claimed in claim 1 wherein said charged particle source directs said charged particles from a location or locations offset from said axis.

50. (Amended) An analyser as claimed in claim 1 wherein said charged particle source and said detection means are both located between said axis and said inner field defining means.

A14

51. (Amended) An analyser as claimed in claim 1 wherein said charged particles are brought to a focus at discrete positions spaced apart from each other along said inner field defining means and said detection means comprises a detector located radially inwards or radially outwards of the inner field defining means and means for focusing said focused charged particles onto said surface of said detector.

52. (Amended) An analyser as claimed in claim 1 wherein said charged particle source includes a real source located at a first position and means for focussing charged particles produced by said real source at a second position different from said first position whereby said charged particle source creates a virtual source at said second position from where said charged particles are directed into said electrostatic focussing field.

53. (Amended) An analyser as claimed in claim 1 wherein said outer field defining means comprises a curved plate having rotational symmetry about said axis.

56. (Amended) A method for operating a charged particle energy analyser as claimed in claim 1 comprising the steps of applying voltage to said electrostatic focusing means in order to obtain operation in the first-order focusing mode within a predetermined energy range and scaling the applied voltage in order to obtain operation in the second-order focusing mode at a selected narrower energy range within said predetermined energy range.

A15

57. (Amended) An analyser as claimed in claim 1 wherein said predetermined range in azimuth is the entire (360°) azimuthal range.

58. (Amended) An analyser as claimed in claim 1 wherein said inner and outer field defining means comprises an inner cylindrical segment and an outer cylindrical segment respectively, wherein said inner and outer cylindrical segments extend over a predetermined angular range in azimuth and said outer cylindrical segment is maintained, in use, at a potential varying linearly in the axial direction.

Please cancel claim 61 without prejudice.